GEORGIA INSTITUTE OF TECHNOLOGY
OFFICE OF CONTRACT ADMINISTRATION
SPONSORED PROJECT INITIATION

Date: September 9, 1977

Project Title: "A Chemical Ionization Source for a Hewlett-Packard 5930A Mass Spectrometer."

Project No: E-16-625

Project Director: Dr. B. T. Zinn and Dr. R. F. Browner

Sponsor: National Science Foundation

Agreement Period: From 9/1/77 Until 2/28/79
(Includes the 6-month unfunded flexibility period)

Type Agreement: Grant No. ENG77-18330

Amount: $15,500 (NSF funds)
15,500 (GIT funds - E-16-350)
$31,000 TOTAL

Reports Required: Annual Technical Letter, Final Technical Report, Summary of Completed Project.

Sponsor Contact Person (s):

Technical Matters

Contractual Matters
(thru OCA)

James L. Bostick, Grants Officer
National Science Foundation
Washington, D. C. 20550

Defense Priority Rating: N/A

Assigned to: Aerospace Engineering (School/Laboratory)

COPIES TO:

Project Director
Division Chief (EES)
School/Laboratory Director
Dean/Director–EES
Accounting Office
Procurement Office
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Library, Technical Reports Section
Office of Computing Services
Director, Physical Plant
EES Information Office
Project File (OCA)
Project Code (GTRI)
Other

CA–3 (3/76)

GEORGIA INSTITUTE OF TECHNOLOGY
OFFICE OF CONTRACT ADMINISTRATION

SPONSORED PROJECT TERMINATION

Date: March 24, 1980

Project Title: A Chemical Ionization Source for a Hewlett-Packard 5930A Mass Spectrometer

Project No: E-16-625

Project Director: Dr. B. T. Zinn and Dr. R. F. Browner

Sponsor: NSF

Effective Termination Date: February 28, 1979 (Grant Expiration)

Clearance of Accounting Charges: February 28, 1979

Grant/Contract Closeout Actions Remaining:

- _ Final Invoice and Closing Documents
- x Final Fiscal Report Accounting (FCTR)
- _ Final Report of Inventions
- _ Govt. Property Inventory & Related Certificate
- _ Classified Material Certificate
- _ Other _____

Assigned to: Aerospace Engineering (School/Laboratory)

COPIES TO:

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✓ Reports Coordinator (OCA)
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Project File (OCA)
Project Code (GTRI)
Other C. E. Smith

CA–4 (1/79)

NATIONAL SCIENCE FOUNDATION
Washington, D.C. 20550

FINAL PROJECT REPORT
NSF FORM 98A

PLEASE READ INSTRUCTIONS ON REVERSE BEFORE COMPLETING

PART I–PROJECT IDENTIFICATION INFORMATION

1. Institution and Address	2. NSF Program	3. NSF Award Number
		ENG77-18330
	4. Award Period	5. Cumulative Award Amount
	From 9.1.77 To 2.28.79	$15,500

6. Project Title
Chemical Ionization Source for a Hewlett-Packard 5930A Mass Spectrometer

PART II–SUMMARY OF COMPLETED PROJECT *(FOR PUBLIC USE)*

The chemical ionization mass spectrometric facility funded by this program has been used for the chemical analysis of smoke particulates produced by the combustion of polymers. This has aided greatly our ability to determine the chemical composition of the smoke.

Smoke analysis from polymer combustion has two primary objectives: (1) the mechanisms of smoke formation may be unravelled; (2) the toxic nature of the smoke components may be determined. Smoke is a major cause of life loss in domestic and industrial fires, and the polymeric materials used widely in electrical insulation (PVC) and furnishing materials (polyurethane foam) are major contributors to this smoke.

The chemical ionization mass spectrometer facility has allowed us to obtain detailed analysis of the components of smoke from polyurethane which otherwise would have been impossible. With the help of this information, it is hoped to be able ultimately to design polymers with less hazardous smoke formation properties.

PART III–TECHNICAL INFORMATION *(FOR PROGRAM MANAGEMENT USES)*

1. ITEM *(Check appropriate blocks)*	NONE	ATTACHED	PREVIOUSLY FURNISHED	TO BE FURNISHED SEPARATELY TO PROGRAM	
				Check (✓)	Approx. Date
a. Abstracts of Theses					
b. Publication Citations					
c. Data on Scientific Collaborators					
d. Information on Inventions					
e. Technical Description of Project and Results					
f. Other *(specify)*					

2. Principal Investigator/Project Director Name *(Typed)*	3. Principal Investigator/Project Director Signature	4. Date